

REMARKS

This Amendment is fully responsive to the final Office Action dated April 10, 2008, issued in connection with the above-identified application. A request for continued examination (RCE) is enclosed. Claims 22-28, 31-37, 40 and 42 are pending in the present application. By this Amendment, claims 22, 36, 40 and 42 have been amended. Favorable reconsideration is respectfully requested.

At outset, the Applicants respectfully request that the Examiner contact the undersigned attorney at the earliest convenience to schedule a telephone interview to discuss the rejections in the Office Action and the amendments to the claims provided by this Amendment. The Applicants would like to schedule the interview prior to a subsequent action being issued in connection with the present application.

In the Office Action, claims 22-29, 31-37, 40 and 42 have been rejected under 35 U.S.C.103(a) as being unpatentable over Hoffberg et al. (U.S. Patent No. 6,400,996, hereafter "Hoffberg") in view of Michihiro (Japanese Publication No. JP2002-007020, hereafter "Michihiro").

The Applicants have amended independent claims 22, 36, 40 and 42 to further distinguish the present invention from the cited prior art. For example, claim 22 has been amended to recite the following:

"[a]n operation history utilization system which utilizes a user's operation history on a device, and provides the user with a service, the system comprising:...

an operation history reception unit operable to receive the operation history data transmitted from said device;

an operation history database unit operable to accumulate the received operation history data;

a pattern extraction unit operable to extract the frequent operation pattern from the operation history data accumulated in said operation history database unit;

a pattern database unit operable to store the extracted frequent operation pattern;

a pattern monitor unit operable to monitor whether or not a sequence of operation history data newly received by said operation history reception unit corresponds to the frequent operation pattern stored in said pattern database unit;

a service provision unit operable to provide the service according to the user's behavior predicted from a result of the monitoring performed by said pattern monitor unit;

a function database unit operable to store a predetermined relationship between an operation performed by said device and a function provided to the user in response to the operation, and

wherein said pattern extraction unit is operable to compare the operation history data accumulated in said operation history database unit with a predetermined relationship in said function database unit, convert the operation history data into a sequence of functions, extract a frequent operation pattern from the sequence of functions, and store the extracted frequent operation pattern into said pattern database unit, and

the function provided to the user is a main function associated with a name of said device, and the operation history data converted into the sequence of functions is used for predicting the user's behavior.” (Emphasis added).

The features noted above in independent claim 22 are similarly recited in independent claims 36, 40 and 42. Specifically, claim 36 is directed to a method; claim 40 is directed to an apparatus; and claim 42 is directed to programs; all of which similarly recite the features noted above in claim 22. The above features of the present invention are fully supported by the Applicants' disclosure (see e.g. col. 41, lines 3-67; col. 53, lines 66-67; col. 54, lines 1-10; col. 127, lines 15-41).

The present invention, as recited in claims 22, 36, 40 and 42, is distinguishable over the cited prior art in that a sequence of operations are converted into a sequence of functions, and the sequence of functions are used for predicting a user's behavior. This prediction can then be used for providing a service to the user that most accurately corresponds to the function. No such feature is believed to be disclosed or suggested by the cited prior art.

In the Office Action, the Examiner relied on Hoffberg in view of Michihiro for disclosing or suggesting all the features of claims 22, 36, 40 and 42.

However, at best, Hoffberg discloses the use of prior history data in order to extract “trends” or “rules,” and discloses a climate control system based on learned complex behaviors of a user, such as an individual’s movement in a dwelling. Hoffberg fails to disclose or suggest any “function” used as a generic concept of an “operation.” Thus, Hoffberg also fails to disclose or suggest converting a sequence of operations into a sequence of functions, and using the sequence of functions for predicting a user’s behavior, as in claim 22, 36, 40 and 42.

Moreover, Michihiro fails to overcome the deficiencies noted above in Hoffberg. Michihiro discloses a technique for monitoring operations of a user, storing histories of the operations, and extracting a series of operations that frequently appear as routine processing (operation patterns) from the details of the histories (see e.g., Abstract). Thus, similar to Hoffberg, Michihiro fails to disclose or suggest converting a sequence of operations into a sequence of functions, and using the sequence of functions for predicting a user’s behavior, as in claims 22, 36, 40 and 42.

Based on the above discussion, no combination of Hoffberg in view of Michihiro would result in, or otherwise render obvious, claims 22, 36, 40 and 42. Likewise, no combination of Hoffberg in view of Michihiro would result in, or otherwise render obvious, claims 23-22, 31-35, 37 and 38 at least by virtue of their respective dependency from independent claims 22 and 36.

In light of the above, the Applicants respectfully submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the Office Action dated April 10, 2008, and pass this application to issue.

The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

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